

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007913**Date Inspected:** 14-Jul-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Wu Zhi Cheng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Segment 1AAE and lifts 3E and 3W**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

**OBG segment 1AAE**

This QA assisted Caltrans QA Mr. Shrikant Utekar perform Visual Testing (VT) of material and welds after the contractor sandblasted the internal portion of this segment. This QA observed numerous areas of undercut, overlap, porosity and incomplete fusion on various welds. All the areas were marked for repair and recorded on the applicable weld map.

**OBG lift 3E and 3W**

This QA received ZPMC Non Destructive Testing (NDT) notification No. 003693 to perform Magnetic particle Testing (MT) of approximately 15% of the welds previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA did not test any of the welds listed on the above mentioned NDT notification for the following reasons: (Lift 3E) welds CA006-046 and 058, CA004-034 and 046 and CA002-062 Visual Testing (VT) noncompliant due to excessive undercut. (Lift 3W) welds CA005-022, CA003-046, 058, 034 and 022, CA005-046 and CA001-026 have not been completed. Welds CA005-034, CA001-062 and 038, SEG014E-007, SEG014E-030, SEG014E-053 and SEG014D-007 MT has not been performed by ZPMC. This QA informed ABF inspector

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identified as Mr. Li Jing Bo of the above mentioned issues with the welds on the NDT notification. Mr. Li inspected several of the welds on lift 3E and concurred with this QA. ZPMC QC was not available to be informed of the above mentioned issues at the time this QA was present.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

### Summary of Conversations:

As mentioned above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hall,Steven	Quality Assurance Inspector
<b>Reviewed By:</b>	Prue,Erik	QA Reviewer

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